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# **Imagery Analysis Monthly Review**

**May 1980**

**Top Secret**

*IS MR 80-004K*

*June 1980*

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Intelligence Sources  
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This publication of the Office of Imagery Analysis contains substantive findings and analytical judgments that were derived principally from analysis of imagery. Although information from other sources of intelligence may be included for background, this publication does not reflect an all-source assessment and has not been formally coordinated within CIA. (U)

Comments and queries on the contents of this publication are welcomed. They should be directed to the analyst whose name and green line extension appear after each article. (U)

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*IS MR 80-004K*

*June 1980*

25X1

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25X1

**Contents**

<i>Page</i>			
1			25X1
2	<b>New Self-Propelled Artillery Weapon Identified at Perm 172, USSR (S)</b>	<div></div> Perm Armament Plant 172, USSR, reveals the presence of a new self-propelled artillery weapon in the plant's shipping yard. (SNF WNINTEL)	25X1
3	<b>Addition of Mechanized Infantry Regiments to Chinese Armored Divisions (S)</b>	Analysis of satellite photography suggests that the Chinese are adding a mechanized infantry regiment to each of their armored divisions. (SNF WNINTEL)	
4	<b>Chinese Upgrade Their Border Defenses in Shenyang Military Region (S)</b>	<div></div> the Chinese are upgrading their defenses along the Sino-Mongolian border in northwestern Shenyang Military Region. (TS R)	25X1
5	<b>Laser Rangefinders and Infrared Searchlights on Chinese Tanks (U)</b>	Photographs appearing in a Chinese military magazine and on Chinese television recently indicate that laser rangefinders and infrared searchlights have been installed on some Chinese tanks. (U)	
6	<b>Increased Heavy-Lift Capability for Libyan Ground Forces (S)</b>	Imagery analysis reveals that during the past 28 months Libya has greatly improved its ability to transport its armored force with the addition of tank transporters, lowbed trailers, and heavy-duty cargo trucks. (TS R)	
8	<b>New OIA Publications</b>		

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25X1

25X1

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25X1

**New Self-Propelled Artillery Weapon  
Identified at Perm 172, USSR (S)**

[redacted] Perm Armament Plant 172, USSR, reveals the presence of a new self-propelled (SP) artillery weapon in the plant's shipping yard. We cannot determine from this single sighting whether the weapon is still in its testing stage or already in production. However, new vehicles and weapons previously seen in the shipping yard at Perm have later been serially produced and deployed. In the past seven years, the Soviets have deployed four new SP artillery weapons with their ground forces—a 152-mm SP howitzer M-1973, a 122-mm SP howitzer M-1974, a 203-mm SP gun M-1975, and a 240-mm SP mortar M-1977. (TSR)

The new SP weapon, which was canvas covered on the April photography of Perm, appears to be the

same as one imaged at the Soviet's Donguz Artillery Test Area in May, June, and July of 1977. The chassis seen at Donguz and Perm have the identification features and dimensions of the GANEF or modified GANEF chassis. [redacted]

[redacted] Neither has a turret. The weapon's tube, including what appears to be its breech, extends from the rear of the chassis [redacted] beyond the front of the chassis. (TSR)

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### **Addition of Mechanized Infantry Regiments to Chinese Armored Divisions (S)**

Analysis of satellite photography suggests that the Chinese are adding a mechanized infantry regiment to each of their armored divisions. Thus far, mechanized infantry regiments have been added to two of China's 11 armored divisions and a regiment is currently being formed at a third division. These mechanized infantry regiments—which are equipped with M-1967 armored personnel carriers (APCs)—provide the armored divisions with a force of infantrymen capable of keeping pace with the divisions' tanks. (TSR)

Two of the three mechanized infantry regiments—at Yutian and Xuzhou—are organized into three battalions with about 40 APCs per battalion. The third regiment, which is not yet at full strength, is at Siping. (TSR)

The first evidence that the Chinese were adding a mechanized infantry regiment to their armored divisions was observed on photography at Xuzhou in late 1976. Analysis of earlier photography revealed that this regiment began forming in the early 1970s. (TSR)

The mechanized infantry regiment at Yutian was created by the reorganization of an armored division there. Before 1979, the organization of this division was different from that seen in any other armored division in China. It had three armored regiments, each of which appeared to contain three tank battalions and a mechanized infantry battalion. Recent photography indicates that the three mechanized infantry battalions were consolidated to form a new regiment similar to the one at Xuzhou. (TSR)

Evidence that a mechanized infantry regiment was being added to the armored division near Siping was first observed in late 1976. Although the presence of only one battalion can be confirmed at Siping based on APC sightings, the unit's vehicle storage capacity suggests that the regiment contains two battalions. (TSR)

Most of the APCs produced in China to date are used in tank regiments as reconnaissance and command vehicles. As additional tank regiments receive their full complement of APCs for reconnaissance and command, additional APCs will become available for deployment with mechanized infantry regiments in the remaining armored divisions. (TSR)

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**Locations of China's Mechanized Infantry Regiments and Armored Divisions (TS R)**



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### **Chinese Upgrade Their Border Defenses in Shenyang Military Region (S)**

Imagery of April and May 1980 shows that the Chinese are upgrading their defenses along the Sino-Mongolian border in northwestern Shenyang Military Region. One new regiment and four new battalions apparently will be added in two garrison areas, and additional weapons have been introduced at three installations in these garrison areas. (TSR)

New buildings which are in various stages of construction indicate that a regiment will be added to the existing regiment at Bugt. At another area at Bugt, construction indicates that at least one battalion will be added to an existing battalion. Facilities under construction indicate a new battalion will be added to one regiment and at least two new battalions will be added to another regiment at Yuanbaotun. The buildings at Bugt and Yuanbaotun have been under construction since at least the end of April 1980. (TSR)

BM 14-17/19 rocket launcher battalions have been added to the artillery units which are subordinate to the garrison divisions at Linxi and Bugt, and a 120-mm mortar battery has been added to the unit at

Shimenzi. Usually, BM 14-17/19 rocket launchers are seen deployed only with the artillery regiments of Chinese main force armies and subordinate infantry divisions. Although 120-mm mortars are usually deployed with border garrison units as well as with main forces, this is the first time we have seen them with this unit. The divisions at these three installations, which have had a large number of antitank weapons for many years, will now have an indirect-fire weapon (mortar) and an area target weapon designed for use against "soft" targets such as infantry. (TSR)

The construction of a new rail line in the northwestern area of Shenyang Military Region has been seen on photography for the past few years. While this rail line is primarily for economic development, it will facilitate the movement of logistical support to the defensive garrisons. (TSR)

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### Laser Rangefinders and Infrared Searchlights on Chinese Tanks (U)

Photographs appearing in a Chinese military magazine and on Chinese television recently indicate that laser rangefinders and infrared (IR) searchlights have been installed on some Chinese tanks. Laser rangefinders, used on most US and European and on many Warsaw Pact tanks, provide accurate distance-to-target data that increases the effectiveness of a tank's main gun. (C)

In the March 1980 Chinese *PLA Pictorial* magazine, photographs show laser rangefinders and IR lights mounted on Type 59 tanks. The Type 59 is China's main battle tank. The photographs apparently were taken at the Baotou tank plant, China's only known production facility for Type 59 tanks. One photograph shows a closeup of a laser device and illustrates the two apertures normally seen on laser rangefinders—one aperture for transmitting the laser beam to the target and the other for receiving the reflected light. Another photograph shows about 35 externally assembled tanks with the laser rangefinder present on at least 20 of them. The presence of the rangefinder on these tanks suggests that the rangefinder may now be a standard item on newly produced tanks. (SNF WNINTEL)

An IR searchlight, used for night viewing, is mounted on the turret beside the rangefinder in the

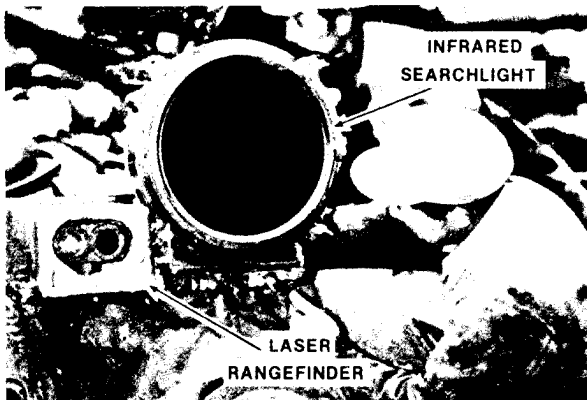
March 1980 photographs. Such searchlights have not previously been seen on available ground photographs of Chinese tanks. Both the laser rangefinder and the IR searchlight appear to be bolted to the tank turret and probably could be retrofitted to previously built tanks. A Joint Publications and Research Service translation of the magazine picture caption reads, "Installing An Infrared Sighting Device and Laser Rangefinder." (U)

In early 1979, several news programs on Chinese television showed possible laser rangefinders mounted on a few Type 62 light tanks used during the Sino-Vietnamese conflict. Details of the rangefinders, however, were not as visible as those in the *PLA Pictorial* magazine. (C)

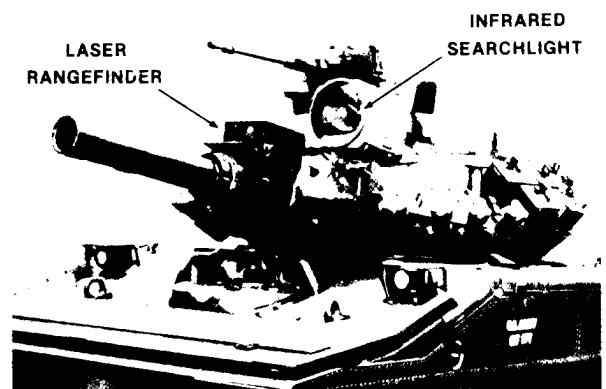
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### Laser Rangefinders and Infrared Searchlights on Chinese and US Tanks (U)



Chinese Type 59 Tank (U)  
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US Sheridan Light Tank (U)

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### Increased Heavy-Lift Capability for Libyan Ground Forces (S)

Imagery analysis reveals that Libya has greatly improved its ability to transport its armored forces. During the past 28 months, Libya has acquired at least 245 tank transporters, 190 heavy-duty lowbed trailers, and 310 heavy-duty cargo trucks. Before the addition of these vehicles, Libya's heavy-lift inventory consisted of 50 to 60 tank transporters. The new equipment gives the Libyans the capability to transport about 265 tanks, equivalent to nine tank battalions, about 190 lightly armored vehicles, and associated supplies. The lowbed trailers and cargo trucks are at Tajura Barracks and Vehicle Storage Area, Tarabulus, and the tank transporters are at Tajura and at four other military installations in Libya. (TSR)

Of the 245 tank transporters, at least 210 are YTS 10050-series semitrailers with FTT 3500 tractors. They were manufactured by a Dutch-owned company, Van Doorn's Automobielfabrieken (DAF). The YTS semitrailers consist of 20 six-axle semitrailers with 100-ton capacities, 70 three-axle semitrailers with approximately 65-ton capacities, and 120 two-axle semitrailers with 55-ton capacities. Each six-axle semitrailer is capable of transporting two tanks, and each of the two- and three-axle semitrailers is capable of transporting one tank. The other 35 tank transporters are Soviet ChMZAP two-axle, 60-ton-capacity semitrailers with MAZ-537 tractors. Each ChMZAP is capable of transporting

one tank. (TSR)

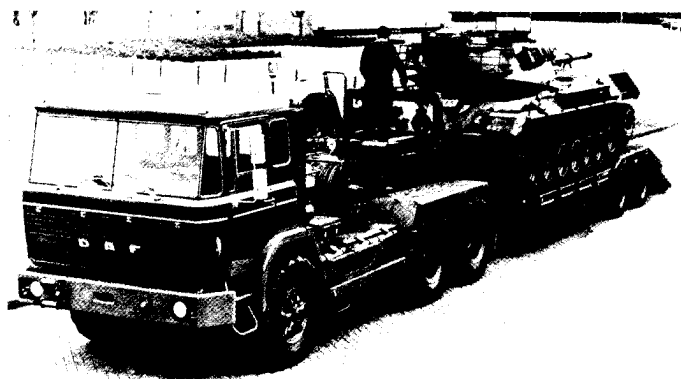
The manufacturer of the 190 heavy-duty lowbed trailers is unknown. Each of these trailers has a carrying capacity of approximately 20 tons. This capacity is sufficient for transporting lightly armored vehicles such as armored personnel carriers and mobile air defense equipment. (TSR)

The manufacturer of the 310 heavy-duty cargo trucks has not been confirmed. However, according to an Associated Press report, a US firm, the Oshkosh Corporation, contracted to sell 400 heavy-duty cargo trucks to the Libyans for nonmilitary use. The trucks at Tarabulus closely resemble the Oshkosh trucks. They have an approximate capacity of 10 tons and may be used to carry ammunition for the Libyan armored force. (TSR)

We have not identified any recent deliveries of the Dutch-manufactured equipment but have observed that the Libyans are continuing to receive additional Soviet tank transporters, the lowbed trailers, and the heavy-duty cargo trucks. (TSR)

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Dutch-Manufactured 55-Ton Tank Transporter (U)



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## New OIA Publications

The following reports have been published by the Office of Imagery Analysis since the last issue of the *Imagery Analysis Monthly Review*.

### Imagery Research Papers

1. IS 80-10007K, [ ] *Iran: Analysis of Selected Industries in Tabriz*, May 1980 (Top Secret RUFF) 25X1
2. IS 80-10083K, [ ] *New Large Radar at R&D Radar Facility 1, Sary Shagan Missile Test Center, USSR*, May 1980 (Top Secret RUFF [ ]) 25X1  
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3. IS 80-10029K, [ ] *Soviet Ground Force Divisions in the Three Western Military Districts, 1975-79*, April 1980 (Top Secret CODEWORD [ ]) 25X1  
25X1

### Intelligence Memorandums

1. IS 80-10069J, [ ] *Cuba-Angola, Possible Troop Reductions* (Top Secret CODEWORD [ ]) 25X1  
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### Imagery Analysis Memorandums

1. IS 80-10042K, [ ] *Percentage of Soviet ICBM Silos Off-Line as a Result of Modernization, Conversion and Modification Programs* (Top Secret RUFF [ ]) 25X1  
25X1
2. IS 80-10062K, [ ] *Space Communications Equipment Design Reportedly Occurring at the Moscow Scientific Research Institute of Radio, USSR* (Top Secret RUFF [ ]) 25X1  
25X1
3. IS 80-10089K, [ ] *Instrumentation on China's Space Event Support Ships* (Top Secret RUFF [ ]) 25X1  
25X1
4. IS 80-10050K, [ ] *Recent Developments in the Oil and Gas Fields of the Middle Ob District of West Siberia, USSR* (Top Secret RUFF [ ]) 25X1  
25X1
5. IS 80-10067, *Status and Activity on the Kampuchean Railroad System* (Secret [ ]) 25X1  
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6. IS 80-10071, *Significant Increase in Ethylene Production in the Soviet Union Since 1979* (Secret [ ]) 25X1  
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7. IS 80-10075K, [ ] *Selected Vehicle Assembly Plants in Egypt's Arms Industry* (Top Secret RUFF [ ]) 25X1  
25X1
8. IS 80-10064, *Offshore Oilfield Development in the Bo Hai, China* (Secret [ ]) 25X1  
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10. IS 80-10092, *Oilfield Development at Dushanzi, China* (Secret [REDACTED]) 25X1
11. IS 80-10074K, [REDACTED] *Construction Activity Since 1976 at the Wah Arsenal Ordnance Factory, Pakistan* (Top Secret RUFF) 25X1
12. IS 80-10077K, [REDACTED] *Dimensions of the SS-N-12 Cruise Missile* (Top Secret RUFF) 25X1
13. IS 80-10090K, [REDACTED] *Submarine Modules to be Produced at Fuling Shipyard, China* (Top Secret RUFF [REDACTED]) 25X1  
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- [REDACTED]
15. IS 80-10066K, [REDACTED] *Expansion of Production Facilities at Soviet Tank Plants--1979* (Top Secret RUFF) 25X1
16. IS 80-10072J, [REDACTED] *Confirmed Relocation of the 41st Infantry Division, 14th Army, Kunming Military Region* (Top Secret CODEWORD [REDACTED]) 25X1  
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17. IS 80-10094K, [REDACTED] *Soviet Military Equipment Deliveries to Algeria* (Top Secret RUFF [REDACTED]) 25X1  
25X1
18. IS 80-10102J, [REDACTED] *6th Infantry Division, Urumqi Military Region* (Top Secret CODEWORD, [REDACTED]) 25X1

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